

ABSTRACT

A hard disk hub has a disk-mounting face formed at one end as a truncated conical surface of revolution symmetric about the hub axis. A cylindrical inner hub member is coaxial with the hub body outside diameter and the surrounding mounting face. The inner hub member is adapted to receive a planar disk with a central mounting hole with disk inside diameter fitted around it. The mounting face is disposed at a hub conning angle ($\pi/2 \pm \Omega$) relative to the hub axis. Hub conning angle Ω is selected so that a disk mounting force F applied to an inner disk portion surrounding the central mounting opening bends a portion of the disk interior to the hub inside diameter to conform contiguous facing relationship with the conical disk-mounting face. This interior bending portion reduces or eliminates the tendency of the outer disk portion to form an excessive conning angle θ .